

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Christian Steenbergen, Ed Beeman, Dirk Erickson, Thomas L. Pratt,
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Assignee: Dell Products L.P.

Title: Optical Medium Aligned Information System and Method

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Examiner: Adam Giesy Group Art Unit: 2627

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Austin, Texas
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Mail Stop Appeal Brief - Patents
Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF UNDER 37 CFR § 41.37

Dear Sir:

Applicant submits this Appeal Brief pursuant to the Notice of Appeal filed in this case on July 16, 2007. The \$500.00 fee for this Appeal Brief is being paid electronically via the USPTO EFS. The Board is authorized to deduct any other amounts required for this appeal brief and to credit any amounts overpaid to Deposit Account No. 502264.

I. REAL PARTY IN INTEREST - 37 CFR § 41.37(c)(1)(i)

The real party in interest is the assignee, Dell Products L.P. as named in the caption above and as evidenced by the assignment set forth at Reel 014751, Frame 0502.

II. RELATED APPEALS AND INTERFERENCES - 37 CFR § 41.37(c)(1)(ii)

Based on information and belief, there are no appeals or interferences that could directly affect or be directly affected by or have a bearing on the decision by the Board of Patent Appeals and Interferences in the pending appeal.

III. STATUS OF CLAIMS - 37 CFR § 41.37(c)(1)(iii)

Claims 1-20 are pending in the application. Claims 1, 2, 5-12 and 16-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,278,671 issued to Gotoh et al. Claims 3, 4, and 13-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,278,671 issued to Gotoh et al. The rejection of Claims 1-20 is appealed. Appendix "A" contains the full set of pending claims.

IV. STATUS OF AMENDMENTS - 37 CFR § 41.37(c)(1)(iv)

No amendments after final have been requested or entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER - 37 CFR § 41.37(e)(1)(v)

An optical medium disc (Figure 2, element 14) first layer (Figure 3, element 40) stores a first set of embedded information (Figure 3, element 38) within a first radii and a second layer (Figure 3, element 42) disposed over the first layer stores a second set of embedded information (Figure 3, element 44) aligned to substantially overlap the first set of information (Claim 1; page 6, line 16 – pg. 7, line 30). First and second sets of information (Figure 3, elements 38 and 42) are embedded at a predetermined radius of an optical medium (Figure 2, element 14) and the optical medium is inserted in an optical drive (Figure 1, element 12), the optical drive initiated to use the optical medium by reading the first and second sets of information (Claim 11; page 6, line 16 – pg. 7, line 30). Information handling system (Figure 1, element 10) components (Figure 1, elements 24-28) generate information to store on an optical medium (Figure 1, element 14) with an optical drive (Figure 1, element 12), the optical drive having a pick-up head (Figure 1, element 16) to read identification information from first and second aligned information areas (Figure 3, elements 38 and 44) located on first and second layers (Figure 3, elements 40 and 42) of the optical medium (Claim 17; page 5, line 29 – pg. 7, line 30).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL - 37 CFR § 41.37(c)(1)(vi)

Claims 1, 11 and 17 stand improperly rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,278,671 issued to Gotoh et al.

VII. ARGUMENT - 37 CFR § 41.37(c)(1)(vii)

Gotoh cannot anticipate Claims 1, 11 and 17 because Gotoh fails to teach, disclose or suggest all elements recited by Claims 1, 11 and 17. Accordingly, Applicants respectfully request that the Board reverse the rejections of Claims 1, 11 and 17.

A. Claim 1

Gotoh discloses optical disc barcode formation by laser trimming on a reflective film in a post-cutting area of an optical disc.

Claim 1 recites, in part, “a second set of embedded information stored at the second layer aligned to substantially overlap the first set of information”.

Gotoh cannot anticipate Claim 1 because Gotoh fails to teach, disclose or suggest all elements recited by Claim 1. For instance, Gotoh fails to teach, disclose or suggest “a second set of embedded information stored at the second layer aligned to substantially overlap the first set of information” as recited by Claim 1. Gotoh embeds a barcode in an optical medium to help secure information stored on the optical medium by writing with a laser over pits stored in the optical medium. With a double layer optical medium, Gotoh writes the barcode on both layers for enhanced security (*see, e.g.*, Figure 7 and related discussion at 12:1-11). As is depicted in Figure 2A, writing the barcode is performed by using the laser to make a non-reflective portion that eliminates any information stored on the optical medium where the barcode is written. Thus, Gotoh cannot anticipated Claim 1, which recites that first and second sets of embedded information stored in different layers overlap each other. Accordingly, Applicants respectfully request that the Board reverse the rejection of Claim 1.

B. Claim 11

Claim 11 recites, in part, “initiating the optical drive to use the optical medium by bringing the optical drive read head to the predetermined radius and reading the first and second sets of information.”

Gotoh cannot anticipate Claim 11 because Gotoh fails to teach, disclose or suggest all elements recited by Claim 11. For example, Gotoh fails to teach, disclose or suggest “initiating

the optical drive to use the optical medium by bringing the optical drive read head to the predetermined radius and reading the first and second sets of information” as recited by Claim 11. As is set forth with respect to Claim 1, the barcode is on the same layer as other information stored on the disc, and thus fails to anticipate the first and second layers recited by Claim 11. In addition, Gotoh uses information from a barcode to prevent piracy where the barcode is placed in a pre-pit area in overwriting fashion (9:51-10:17). The barcode authorizes playback of information stored on the disc, but does not provide information to initiate the optical drive. Accordingly, Applicants respectfully request that the Board reverse the rejection of Claim 11.

C. Claim 17

Claim 17 recites, in part, “an optical media identification module interfaced with the pickup head and operable to determine identification information read from first and second aligned embedded information areas, the first embedded information area in a first layer of the optical medium, the second embedded information area in a second layer of the optical medium.”

Gotoh cannot anticipate Claim 17 because Gotoh fails to teach, disclose or suggest all elements recited by Claim 17. For example, Gotoh fails to teach, disclose or suggest “identification information read from first and second aligned embedded information areas, the first embedded information area in a first layer of the optical medium, the second embedded information area in a second layer of the optical medium.” Gotoh embeds a barcode in a data layer, not in a separate layer, and therefore cannot anticipate Claim 17. Accordingly, Applicants respectfully request that the Board reverse the Examiner’s rejection of Claim 17.

VIII. CLAIMS APPENDIX - 37 CFR § 41.37(c)(1)(viii)

A copy of the pending claims involved in the appeal is attached as Appendix A.

IX. EVIDENCE APPENDIX - 37 CFR § 41.37(c)(1)(ix)

None

X. RELATED PROCEEDINGS APPENDIX - 37 CFR § 41.37(c)(1)(x)

There are no related proceedings.

XI. CONCLUSION

For the reasons set forth above, Applicant respectfully submits that the rejection of pending Claims 1-20 is unfounded, and requests that the rejection of claims 1-20 be reversed.

I hereby certify that this correspondence is being electronically submitted to the COMMISSIONER FOR PATENTS via EFS on August 28, 2007.

/Robert W. Holland/

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Respectfully submitted,

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CLAIMS APPENDIX A - 37 CFR § 41.37(c)(1)(viii)

1. An optical medium disc for storing information readable by an optical disc drive, the optical medium disc comprising:

- a first layer having reflective properties, the first layer operable to store information through manipulation of the reflective properties by a laser;
- a second layer disposed over the first layer;
- a first set of embedded information stored at the first layer within a first range of radii of the optical medium; and
- a second set of embedded information stored at the second layer aligned to substantially overlap the first set of information.

2. The optical medium disc of Claim 1 having data and protective layers, wherein the first set of embedded information comprises plural repeated subsets distributed around the entire circumference of the optical medium disc in a data layer, and the second set of embedded information is distributed over the first set of embedded information around a portion of the circumference of the optical medium disc at the protective layer so that at least one complete subset of the first set of embedded information remains uncovered by the second set of embedded information.

3. The optical medium disc of Claim 2 wherein the first set of embedded information comprises eight repeated subsets distributed around the entire circumference of the optical medium disc and the second set of embedded information is distributed over less than one third of the circumference of the optical medium disc.

4. The optical medium disc of Claim 2 wherein the second set of embedded information comprises ink marking over the protective layer.

5. The optical medium disc of Claim 2 wherein the second set of embedded information comprises laser cutting over the protective layer.

6. The optical medium disc of Claim 1 wherein the first set of embedded information comprises a first encoding and the second set of embedded information comprises a second encoding, the first and second sets of information operable to provide a mixed signal to an optical disc drive.

7. The optical medium of Claim 6 wherein the mixed signal comprises frequency modulation operable to distinguish between the first and second sets of embedded information.

8. The optical medium of Claim 6 wherein the mixed signal comprises phase encoding operable to distinguish between the first and second sets of embedded information.

9. The optical medium of Claim 6 wherein the mixed signal comprises bar coding operable to distinguish between the first and second sets of embedded information.

10. The optical medium of Claim 1 wherein the first set of embedded information has first width and the second set of information has a second width so that first set of embedded information is readable under the second set of embedded information.

11. A method for embedding information in an optical medium having plural layers, the method comprising:

embedding a first set of information in a first layer at a predetermined radius of the optical medium;

embedding a second set of information in a second layer at the predetermined radius of the optical medium;

inserting the optical medium in an optical medium drive; and

initiating the optical drive to use the optical medium by bringing the optical drive read head to the predetermined radius and reading the first and second sets of information.

12. The method of Claim 11 wherein:
- embedding the first set of information further comprises storing the first set of information as plural repeated subsets around the circumference of the optical medium at the predetermined radius; and
- embedding the second set of information further comprises storing the second set of information substantially aligned to cover the first set of information over part of the circumference of the optical medium so that at least one of the repeated subsets of the first set of information remains uncovered.
13. The method of Claim 12 wherein the first set of information comprises eight plural repeated subsets and the second set of information covers one third or less of the first set of information.
14. The method of Claim 11 wherein embedding the first set of information further comprises stamping the first set of information into a data layer.
15. The method of Claim 14 wherein embedding the second set of information further comprises ink marking the second set of information onto the protective outer surface of the optical medium as one or plural subsets.
16. The method of Claim 11 wherein the first and second set of information are modulation coded to output a mixed signal.
17. An information handling system comprising:
- components operable to generate information for storage on an optical medium;
- an optical drive interfaced with the components and operable to accept the information for storage on the optical medium;
- a pick-up head associated with the optical drive and operable to read reflected laser light from the optical medium; and
- an optical media identification module interfaced with the pickup head and operable to determine identification information read from first and second aligned embedded

information areas, the first embedded information area in a first layer of the optical medium, the second embedded information area in a second layer of the optical medium.

18. The information handling system of Claim 17 wherein the first embedded information area comprises a data layer between first and second radii and the second embedded information area comprises a protective layer between the first and second radii.

19. The information handling system of Claim 18 wherein the first and second aligned embedded information areas output a frequency modulated mixed signal that the optical media identification module demodulates to read first and second embedded identification information sets.

20. The information handling system of Claim 18 wherein the first and second aligned embedded information areas output a phase encoded mixed signal that the optical media identification module demodulates to read first and second embedded identification information sets.

EVIDENCE APPENDIX - 37 CFR § 41.37(c)(1)(ix)

None

RELATED PROCEEDINGS APPENDIX - 37 CFR § 41.37(c)(1)(x)

There are no related proceedings.